

TEHUANTEPECER OF FEBRUARY 10-11, 1937

By WILLIS E. HURD

The following account of a Tehuantepecer, experienced during a voyage from San Pedro toward Panama, was prepared by Second Officer N. Clarke of the British Motorship *Skipsea*, Capt. L. Whitehead. The observer has so well described the characteristic preliminary signs of this winter phenomenon of the Gulf of Tehuantepec, as well as the gale itself and the effect of the wind upon the sea, that the account is quoted in its entirety. During the period of the Tehuantepecer the center of a strong high pressure area overlay the Gulf States, and a considerable pressure slope extended thence southward over the Gulf of Mexico, thus resulting in the spill of air across the isthmus and down the Pacific side of the pass entering upon the Gulf of Tehuantepec. Said Officer Clarke:

Position at noon, February 10, was latitude 15°22' N., longitude 98°25' W. Course S63E., 11½ knots. Wind southeast, force 2, slight sea and swell. Barometer 29.93 (uncorrected). The sunset on this day was brickred with red clouds reaching to the zenith. About 9 p. m. a short steep swell from the eastward was observed

and at 10 p. m. wind backed to north-northeast, force 3. The swell increased rapidly, moving slowly round to north-northeast, and at 2 a. m., February 11, a large arched cloud stretching from north to south made its appearance, its lower arc being very black. It rose slowly toward the zenith and scattered there at 3 a. m., but was seen to have regained its arch-like formation on reaching the western horizon. There was no rain. At 3:30 a. m. wind increased to force 6; vessel by this time laboring heavily in high sea. At 4 a. m. vessel was hove to head to sea, for although wind was only force 6, the sea was very dangerous and vessel was receiving much damage. By 8 a. m. wind had risen to force 10 from north-northeast, with terrific squalls, sea very high, and a haze hung around the horizon. Barometer steady at 29.90. During the gale the sea was very remarkable. After a comparative smoothness of a few minutes, a procession of tremendous seas would strike the ship, generally three or four at a time. Some were observed to be so steep that their crests fell backward to windward. These seas could be seen quite easily for 2 or 3 miles in the heavy swell. Our noon position was 14° N., 95°50' W., wind north-northeast 9, barometer 29.91. Vessel hove to and shipping heavy water. After noon cirrus clouds were observed moving to windward, and at 2 p. m. sea began to subside a little, with wind force 8. At 2:45 p. m. resumed course and full speed. By midnight wind had dropped to force 7, north-northeast, and barometer had risen to 29.97; high sea, heavy swell. At 8 a. m., February 12, wind had veered to southeast, force 5; moderate sea and cross swell, and the haze had left the horizon.

CLIMATOLOGICAL TABLES

CONDENSED CLIMATOLOGICAL SUMMARY

In the following table are given, for the various sections of the climatological service of the Weather Bureau, the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

TABLE 1.—Condensed climatological summary of temperature and precipitation by sections, February 1937

[For description of tables and charts, see REVIEW, January, p. 35]

| Section | Temperature | | | | | | | | Precipitation | | | | | | | |
|------------------------|-----------------|---------------------------|-------------------|---------|------|-----------------------|--------|------|-----------------|---------------------------|----------------------------|--------|------------------------|--------|--|--|
| | Section average | Departure from the normal | Monthly extremes | | | | | | Section average | Departure from the normal | Greatest monthly | | Least monthly | | | |
| | | | Station | Highest | Date | Station | Lowest | Date | | | Station | Amount | Station | Amount | | |
| Alabama..... | 48.8 | 0.0 | 3 stations..... | 83 | 8 | Valley Head..... | 14 | 11 | 4.93 | -0.28 | Dothan..... | 9.52 | Mobile Airport..... | 2.32 | | |
| Arizona..... | 45.7 | -2.5 | 2 stations..... | 85 | 24 | McNary..... | -7 | 27 | 1.59 | +.34 | Junipine..... | 9.16 | Gila Bend..... | T | | |
| Arkansas..... | 44.2 | +.7 | El Dorado..... | 84 | 8 | 2 stations..... | 12 | 2 | 2.10 | -1.16 | Texarkana..... | 3.69 | Thornburg..... | .22 | | |
| California..... | 44.5 | -3.7 | 2 stations..... | 84 | 18 | Bridgeport..... | -28 | 3 | 7.13 | +2.72 | Giant Forest..... | 19.85 | Brawley..... | .00 | | |
| Colorado..... | 27.0 | -.2 | Las Animas..... | 77 | 5 | 2 stations..... | -33 | 19 | 1.22 | +.23 | Pagosa Springs (near)..... | 9.32 | 2 stations..... | T | | |
| Florida..... | 60.7 | +.1 | Avon Park..... | 89 | 9 | Bushnell..... | 28 | 6 | 5.04 | +1.86 | St. Petersburg..... | 10.93 | Belle Glade..... | 1.21 | | |
| Georgia..... | 48.6 | +.1 | 3 stations..... | 82 | 8 | Clayton..... | 11 | 26 | 5.29 | +.37 | Blakely..... | 8.14 | Augusta..... | 3.71 | | |
| Idaho..... | 23.4 | -4.5 | Bungalow..... | 66 | 27 | Deadwood..... | -34 | 19 | 2.49 | +.76 | Roland..... | 8.98 | Salmon..... | .13 | | |
| Illinois..... | 29.7 | +.5 | Harrisburg..... | 71 | 8 | White Hall..... | -7 | 2 | 1.50 | -.63 | Anna..... | 3.09 | Golden..... | .46 | | |
| Indiana..... | 31.4 | +1.0 | Seymour..... | 80 | 8 | Frankfort..... | 0 | 17 | 1.86 | -.54 | Princeton..... | 3.10 | Whiting..... | .64 | | |
| Iowa..... | 19.6 | -2.6 | Keokuk..... | 60 | 8 | 3 stations..... | -24 | 10 | 1.04 | -.05 | Washington..... | 3.06 | Denison..... | T | | |
| Kansas..... | 32.7 | .0 | 3 stations..... | 75 | 15 | Healy..... | -11 | 1 | .68 | -.31 | Blue Rapids..... | 2.93 | Atwood..... | .04 | | |
| Kentucky..... | 38.3 | +1.4 | 2 stations..... | 78 | 8 | 4 stations..... | 11 | 12 | 2.40 | +.97 | Jenkins..... | 4.70 | Grant..... | 1.13 | | |
| Louisiana..... | 53.8 | +.1 | do..... | 84 | 8 | 3 stations..... | 22 | 11 | 2.76 | -1.79 | Port Sulphur..... | 6.70 | Achafalaya..... | .59 | | |
| Maryland-Delaware..... | 34.9 | +1.0 | do..... | 72 | 18 | Grantsville, Md..... | 0 | 28 | 3.20 | +.25 | State Sanatorium, Md..... | 5.06 | Princess Anne, Md..... | 1.99 | | |
| Michigan..... | 24.1 | +3.7 | do..... | 63 | 8 | Bessemer..... | -25 | 10 | 1.71 | +.06 | Painesdale..... | 5.12 | Oswaway..... | .44 | | |
| Minnesota..... | 9.5 | -2.9 | do..... | 47 | 18 | Pokegama Falls..... | -43 | 10 | .95 | +.21 | Pigeon River Bridge..... | 2.63 | Tracy..... | .20 | | |
| Mississippi..... | 49.2 | -.1 | Yazoo City..... | 84 | 8 | 2 stations..... | 18 | 11 | 3.64 | -1.23 | Meridian..... | 6.78 | Biloxi..... | 1.16 | | |
| Missouri..... | 32.4 | -.5 | Garber..... | 74 | 7 | Fulton..... | -15 | 5 | 1.38 | -.67 | Seymour (near)..... | 2.80 | Dean..... | .38 | | |
| Montana..... | 17.0 | -5.2 | Grass Range..... | 58 | 16 | Outlook..... | -43 | 9 | .72 | +.03 | Heron..... | 4.95 | 2 stations..... | T | | |
| Nebraska..... | 25.1 | -1.0 | 2 stations..... | 68 | 11 | Ainsworth..... | -17 | 1 | .23 | -.47 | Auburn..... | 1.02 | Ainsworth..... | .00 | | |
| Nevada..... | 31.2 | -2.7 | Las Vegas..... | 80 | 24 | 2 stations..... | -20 | 1 | 1.71 | +.65 | Lewers Ranch..... | 10.80 | Las Vegas Airport..... | .06 | | |
| New England..... | 28.6 | +6.1 | Orono, Maine..... | 61 | 21 | Fort Kent, Maine..... | -19 | 5 | 2.57 | -.56 | Hiram, Maine..... | 5.53 | Eastport, Maine..... | .64 | | |
| New Jersey..... | 34.1 | +3.4 | Belleplain..... | 65 | 9 | 2 stations..... | 4 | 14 | 2.29 | -1.32 | Little Falls..... | 3.61 | Camden..... | 1.32 | | |
| New Mexico..... | 35.6 | -1.7 | Loington..... | 84 | 17 | Selior Ranch..... | -31 | 10 | .92 | +.21 | Aspen Grove Ranch..... | 5.08 | 5 stations..... | .00 | | |
| New York..... | 27.9 | +5.6 | Fredonia..... | 64 | 9 | Indian Lake..... | -21 | 4 | 2.35 | -.32 | North Lake..... | 3.74 | Ogdensburg..... | .86 | | |
| North Carolina..... | 42.5 | -.1 | 2 stations..... | 79 | 8 | Mount Mitchell..... | -5 | 26 | 4.08 | +.02 | Swansboro..... | 9.90 | High Point..... | 2.55 | | |
| North Dakota..... | 6.8 | -2.9 | Hettinger..... | 55 | 15 | Pembina..... | -35 | 1 | .49 | +.03 | Cooperstown..... | 3.31 | Hettinger..... | .02 | | |
| Ohio..... | 31.6 | +2.4 | Chillicothe..... | 75 | 8 | 2 stations..... | 4 | 25 | 1.72 | -.84 | Lock No. 23..... | 5.23 | Lake Milton..... | .67 | | |
| Oklahoma..... | 41.7 | +.8 | Frederick..... | 85 | 5 | Boise City..... | 5 | 1 | .41 | -.90 | Fort Gibson..... | 2.42 | 10 stations..... | T | | |

1 Other dates also.

TABLE 1.—Condensed climatological summary of temperature and precipitation by sections, February 1937—Continued

[For description of tables and charts, see REVIEW, January, p. 35]

| Section | Temperature | | | | | | | | Precipitation | | | | | | | |
|-----------------------|-----------------|---------------------------|------------------------|---------|------|-----------------------|--------|------|-----------------|---------------------------|--------------------------|--------|-----------------------|--------|---------------|--------|
| | Section average | Departure from the normal | Monthly extremes | | | | | | Section average | Departure from the normal | Greatest monthly | | | | Least monthly | |
| | | | Station | Highest | Date | Station | Lowest | Date | | | Station | Amount | Station | Amount | Station | Amount |
| Oregon..... | ° F. | ° F. | Modoc Orchard..... | 68 | 23 | Danner..... | -18 | 1 | In. | In. | McNamers..... | .23.45 | Milton..... | .035 | | .76 |
| Pennsylvania..... | 31.9 | -3.2 | 2 stations..... | 77 | 8 | Somerset..... | -12 | 28 | 2.32 | -.53 | Zionsville..... | .4.92 | Vandegrift..... | | | |
| South Carolina..... | 46.7 | -.7 | 3 stations..... | 80 | 8 | Caesars Head..... | 10 | 26 | 4.26 | -.01 | Caesars Head..... | .7.57 | Winthrop College..... | .2.84 | | |
| South Dakota..... | 16.4 | -2.7 | Rapid City..... | 63 | 16 | 2 stations..... | -28 | 1 | .37 | -.19 | Melette..... | .1.59 | Ottumwa..... | T | | |
| Tennessee..... | 40.9 | -.2 | 3 stations..... | 80 | 8 | Rugby..... | 8 | 11 | 3.56 | -.77 | Morgan Springs..... | .7.10 | | | | .93 |
| Texas..... | 51.0 | -.3 | do..... | 97 | 18 | 2 stations..... | 6 | 10 | .53 | -1.25 | Bronson..... | .4.05 | 12 stations..... | .00 | | |
| Utah..... | 26.2 | -3.8 | St. George..... | 69 | 24 | Woodruff..... | -30 | 1 | 1.72 | +.45 | Silver Lake..... | .6.61 | Hanksville..... | .02 | | |
| Virginia..... | 37.7 | +.7 | Cape Henry..... | 77 | 9 | 2 stations..... | 1 | 26 | 3.15 | +.03 | Clinchport..... | .5.28 | Hopewell..... | .1.69 | | |
| Washington..... | 30.7 | -3.6 | South Bend (near)..... | 67 | 24 | do..... | -21 | 8 | 5.22 | +.11 | Wynoochee Oxbow..... | .21.68 | Mottinger..... | .32 | | |
| West Virginia..... | 34.6 | +1.5 | London..... | 80 | 9 | McNeill..... | -3 | 17 | 3.33 | +.22 | Terra Alta..... | .5.96 | Upper Tract..... | .1.20 | | |
| Wisconsin..... | 16.7 | -.1 | Superior..... | 55 | 18 | 3 stations..... | -36 | 12 | 1.98 | +.79 | Oconto..... | .4.16 | Amery..... | .68 | | |
| Wyoming..... | 20.4 | -1.8 | Cody..... | 64 | 11 | West Yellowstone..... | -43 | 20 | .96 | -.96 | Bechler River..... | .10.06 | Lagrange..... | T | | |
| Alaska (January)..... | 17.9 | +13.6 | Dutch Harbor..... | 55 | 14 | Allakaket..... | -41 | 23 | 4.15 | +.168 | Atka..... | .9.83 | Whale Island..... | .36 | | |
| Hawaii..... | 68.0 | -.5 | Olaa Mill..... | 89 | 2 | Kanalohuluhului..... | 38 | 11 | 13.86 | +.6.86 | Station No. 39..... | .49.43 | Ka Lae..... | .78 | | |
| Puerto Rico..... | 71.3 | -1.3 | 2 stations..... | 92 | 126 | Guineo Reservoir..... | 38 | 2 | 1.24 | -2.02 | La Mina (El Yunque)..... | .8.53 | 3 stations..... | .00 | | |

¹ Other dates also.

TABLE 2.—Climatological data for Weather Bureau stations, February 1937

[Compiled by Annie E. Small, by official authority U. S. Weather Bureau]

¹ Observations taken at airport.

TABLE 2.—Climatological data for Weather Bureau stations, February 1937—Continued

¹ Observations taken at airport.

TABLE 2.—Climatological data for Weather Bureau stations, February 1937—Continued

| District and station | Elevation of instruments | | | Temperature of the air | | | | | | | | | | | | Precipitation | | | Wind | | | Average cloudiness, tenths | Total snowfall | | | | | | | | | |
|---------------------------------|---------------------------|-----|--------------------------|------------------------|-------|-------|-------------------------------|-------------------|---------------------|-----------------------------|--|--|----------------------|----------------------|-------------------------|------------------------|-------------------------|-----------------------------|--------------------------------|------------|--------------------|----------------------------|----------------|-------------|--------|-----|------|------|------|------|------|------|
| | Barometer above sea level | | Thermometer above ground | Pressure | | | Temperature of the air | | | | | | Mean wet thermometer | | | Wind | | | Wind | | | | | | | | | | | | | |
| | Ft. | Ft. | Ft. | In. | In. | In. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | % | Miles | Average hourly velocity | Precipitation from normal | Maximum velocity | CLEAR days | Partly cloudy days | Cloudy days | | | | | | | | | | |
| <i>North Dakota</i> | | | | | | | Mean max. + mean min.-2 | Mean max. -1.4 | Mean max. normal | Departure from normal | Sea level, reduced to mean of 24 hours | Sea level, reduced to mean of 24 hours | Minimum Date | Mean minimum Date | Greatest daily range | Mean relative humidity | Total | Departure from normal | Days with 0.01 inch or more | Date | Clear days | Partly cloudy days | Cloudy days | 0-10 5.2 | In. In | | | | | | | |
| Moorhead, Minn. | 940 | 50 | 58 | 28.94 | 30.02 | -0.09 | 5.6 | -2.5 | 36 | 18 | 15 | -27 | 9 | -4 | 34 | 6 | .77 | +.1 | 8 | 10.0 | nw. | 13 | 1 | 14 | 13 | 7.2 | 15.7 | 13.0 | | | | |
| Bismarck | 1,674 | 8 | 57 | 28.15 | 30.04 | -0.08 | 8.6 | -1.7 | 40 | 16 | 19 | -27 | 1 | -2 | 40 | 8 | .4 | .0 | 4 | 9.3 | nw. | 13 | 13 | 10 | 5 | 5.4 | 5.8 | 3.4 | | | | |
| Devils Lake | 1,478 | 11 | 44 | 28.34 | 30.01 | -0.10 | 4.6 | -5 | 35 | 16 | 14 | -25 | 1 | -4 | 36 | 4 | .3 | .46 | .0 | 7 | 10.3 | nw. | 13 | 8 | 12 | 8 | 5.5 | 5.1 | 6.6 | | | |
| Grand Forks | 833 | 12 | 67 | | | | 3.1 | | 35 | 18 | 14 | -29 | 1 | -8 | 36 | 3 | | .74 | | 8 | nw. | 13 | 7 | 12 | 9 | | 8.6 | 16.2 | | | | |
| Williston | 1,878 | 42 | 50 | 27.95 | 30.04 | -0.07 | 7.2 | -9 | 40 | 12 | 17 | -26 | 9 | -3 | 35 | 7 | | .20 | -2 | 7 | 8.3 | nw. | 12 | 12 | 12 | 4 | 3.8 | 2.5 | 5.9 | | | |
| <i>Upper Mississippi Valley</i> | | | | | | | 24.1 | -0.9 | | | | | | | | | 77 | 1.54 | -0.2 | | | | | | | 5.8 | | | | | | |
| Minneapolis | 919 | 105 | 208 | 28.94 | 29.97 | | 13.4 | -2.5 | 45 | 18 | 22 | -15 | 10 | 5 | 30 | 12 | 9 | 81 | .48 | -.5 | 6 | 12.8 | w. | 13 | 7 | 8 | 13 | 6.4 | 7.6 | 3.0 | | |
| La Crosse | 714 | 11 | 48 | 29.18 | 29.99 | -0.09 | 16.7 | -2.5 | 45 | 18 | 27 | -20 | 10 | 7 | 37 | 15 | 11 | 78 | 1.69 | +.6 | 9 | 6.2 | w. | 17 | 11 | 9 | 12 | 7.6 | 12.2 | 4.9 | | |
| Madison | 974 | 70 | 78 | 28.87 | 29.97 | -0.10 | 19.6 | +.5 | 43 | 13 | 28 | -9 | 10 | 12 | 34 | 17 | 14 | 83 | 1.63 | +.1 | 13 | 10.1 | w. | 27 | 21 | 9 | 15 | 5.9 | 9.7 | 5.4 | | |
| Charles City | 1,015 | 10 | 51 | 28.88 | 30.01 | -0.09 | 14.7 | -2.4 | 40 | 18 | 25 | -19 | 10 | 5 | 40 | 13 | 11 | 86 | 1.25 | +.2 | 7 | 8.6 | nw. | 25 | 21 | 9 | 8 | 11 | 5.8 | 3.9 | | |
| Davenport | 606 | 68 | 161 | 29.34 | 30.03 | -0.07 | 25.0 | +.1 | 50 | 20 | 33 | -1 | 10 | 17 | 38 | 22 | 17 | 74 | 1.61 | 0 | 9 | 12.6 | nw. | 38 | 21 | 8 | 12 | 5.9 | 6.7 | 1.1 | | |
| Des Moines | 861 | 5 | 99 | 29.10 | 30.05 | -0.06 | 21.4 | -2.3 | 47 | 18 | 29 | -5 | 1 | 13 | 34 | 20 | 16 | 80 | -.3 | 8 | 11.7 | nw. | 35 | 13 | 10 | 6 | 12 | 5.2 | 8.2 | 2.6 | | |
| Dubuque | 699 | 60 | 79 | 29.22 | 30.01 | -0.08 | 21.0 | -1.2 | 44 | 18 | 29 | -6 | 10 | 13 | 31 | 18 | 14 | 75 | 2.29 | +.9 | 12 | 7.9 | nw. | 24 | 21 | 12 | 4 | 12 | 5.4 | 8.3 | 5.0 | |
| Keokuk | 614 | 64 | 78 | 29.36 | 30.05 | -0.06 | 27.8 | -.5 | 60 | 8 | 37 | 1 | 10 | 19 | 47 | 23 | 17 | 66 | 1.51 | 0 | 7 | 9.8 | nw. | 34 | 21 | 12 | 3 | 13 | 5.5 | 3.6 | .1 | |
| Cairo | 358 | 87 | 93 | 29.68 | 30.08 | -0.04 | 37.4 | -1.1 | 67 | 8 | 45 | 18 | 10 | 30 | 34 | 35 | 33 | 83 | 1.51 | -1.6 | 8 | 11.4 | s. | 32 | 21 | 6 | 10 | 6.7 | 3.6 | 1.6 | | |
| Peoria | 609 | 11 | 45 | 29.35 | 30.04 | -0.06 | 27.8 | +.1 | 54 | 8 | 36 | 1 | 10 | 19 | 39 | 25 | 21 | 79 | 2.46 | +.4 | 7 | 9.8 | w. | 29 | 21 | 11 | 8 | 9 | 5.1 | 2.0 | .0 | |
| Springfield, Ill. | 636 | 5 | 191 | 29.33 | 30.03 | -0.07 | 30.4 | +.9 | 56 | 8 | 39 | 5 | 10 | 22 | 36 | 27 | 22 | 73 | 1.67 | -.7 | 12 | 13.9 | nw. | 38 | 21 | 7 | 8 | 15 | 6.5 | 4.5 | T | |
| St. Louis | 568 | 179 | 303 | 29.43 | 30.06 | -0.05 | 33.6 | -1.2 | 65 | 8 | 42 | 9 | 10 | 25 | 43 | 29 | 22 | 66 | 1.52 | -1.0 | 9 | 14.8 | nw. | 39 | 21 | 9 | 7 | 12 | 5.9 | 1.4 | .3 | |
| <i>Missouri Valley</i> | | | | | | | 25.6 | -0.7 | | | | | | | | | 73 | 0.55 | -0.8 | | | | | | | 5.4 | | | | | | |
| Columbia, Mo. | 784 | 6 | 64 | 29.19 | 30.06 | -0.05 | 31.2 | -.5 | 61 | 8 | 40 | -9 | 2 | 22 | 43 | | | .66 | -1.4 | 6 | 10.0 | nw. | 34 | nw. | 21 | 9 | 10 | 5.3 | 6.5 | .7 | | |
| Kansas City ¹ | 750 | 32 | 45 | 29.23 | 30.07 | -0.04 | 31.2 | -.0 | 61 | 7 | 40 | 9 | 10 | 23 | 38 | 27 | 21 | 69 | .86 | -.9 | 6 | 12.2 | sw. | 39 | nw. | 15 | 8 | 7 | 13 | 6.0 | 3.9 | T |
| St. Joseph | 967 | 11 | 49 | 28.99 | 30.06 | | 27.6 | | 54 | 18 | 36 | 4 | 1 | 20 | 31 | 24 | 19 | 73 | .89 | -.8 | 6 | 10.2 | nw. | 32 | nw. | 13 | 13 | 4 | 11 | 5.2 | 5.7 | .4 |
| Springfield, Mo. | 1,324 | 98 | 104 | 28.62 | 30.06 | -0.05 | 34.8 | -.4 | 70 | 7 | 44 | 9 | 2 | 26 | 50 | 31 | 25 | 70 | 1.15 | -1.2 | 6 | 12.1 | se. | 34 | nw. | 15 | 8 | 11 | 9.5 | 2.4 | T | |
| Topeka | 987 | 65 | 87 | 28.97 | 30.06 | | 30.4 | -.6 | 60 | 18 | 39 | 4 | 1 | 22 | 33 | 27 | 21 | 70 | 61 | -.9 | 5 | 10.6 | nw. | 32 | nw. | 15 | 11 | 5 | 12 | 5.5 | 5.3 | T |
| Lincoln | 1,189 | 11 | 81 | 28.74 | 30.06 | -0.04 | 25.0 | -1.1 | 49 | 18 | 33 | -3 | 1 | 17 | 34 | 22 | 17 | 70 | .21 | -.7 | 7 | 11.8 | nw. | 37 | nw. | 15 | 10 | 8 | 10 | 5.3 | 1.9 | T |
| Omaha ¹ | 982 | 31 | 44 | 28.96 | 30.06 | -0.05 | 25.2 | -3.3 | 46 | 18 | 31 | -7 | 1 | 14 | 40 | 20 | 16 | 76 | 22 | -.7 | 5 | 13.0 | nw. | 42 | nw. | 13 | 10 | 6 | 12 | 5.5 | 2.1 | T |
| Valentine | 2,593 | 47 | 54 | 27.23 | 30.06 | -0.03 | 22.5 | +.1 | 60 | 16 | 35 | -10 | 1 | 10 | 40 | 18 | 13 | 69 | .04 | -.5 | 4 | 10.2 | nw. | 35 | nw. | 15 | 9 | 10 | 9 | 5.4 | .4 | .7 |
| Sioux City | 1,138 | 64 | 106 | 28.78 | 30.05 | -0.07 | 19.3 | -1.7 | 49 | 18 | 28 | -11 | 1 | 10 | 41 | 18 | 14 | 79 | .30 | -.5 | 5 | 12.3 | nw. | 34 | nw. | 13 | 11 | 5 | 12 | 5.5 | 3.2 | T |
| Huron | 1,307 | 59 | 74 | 28.58 | 30.06 | -0.06 | 14.2 | -1 | 41 | 18 | 24 | -7 | 1 | 5 | 38 | 12 | 10 | 84 | .55 | 0 | 5 | 10.8 | nw. | 38 | w. | 13 | 13 | 9 | 6 | 4.6 | 7.7 | .7 |
| <i>Northern Slope</i> | | | | | | | 21.6 | -0.9 | | | | | | | | | 69 | 0.60 | -0.1 | | | | | | | 6.1 | | | | | | |
| Havre | 2,507 | 11 | 67 | 27.28 | 30.04 | -0.03 | 12.0 | -1.6 | 44 | 16 | 22 | -29 | 9 | 2 | 55 | 11 | 7 | 77 | .24 | -.3 | 5 | 10.3 | sw. | 40 | w. | 17 | 9 | 12 | 7 | 4.8 | 3.0 | 4.0 |
| Helena | 4,124 | 85 | 111 | 25.67 | 30.00 | -0.11 | 22.8 | -2 | 46 | 11 | 32 | -10 | 8 | 14 | 45 | 19 | 12 | 63 | .18 | -.5 | 10 | 8.8 | sw. | 34 | sw. | 5 | 1 | 8 | 19 | 8.1 | 4.2 | .5 |
| Missoula | 3,263 | 80 | 91 | | | | 26.5 | -.2 | 45 | 11 | 34 | 1 | 1 | 19 | 36 | | | 1,03 | +.2 | 5 | 7.5 | w. | 36 | sw. | 26 | 1 | 7 | 20 | 7.6 | 18.0 | 2.3 | |
| Kalispell | 2,973 | 48 | 56 | 26.82 | 29.97 | -0.11 | 21.8 | -1.5 | 42 | 12 | 31 | -9 | 9 | 13 | 27 | 21 | 18 | 81 | 1.03 | -.1 | 14 | 5.4 | w. | 28 | sw. | 16 | 2 | 10 | 16 | 7.6 | 14.5 | 15.0 |
| Miles City | 2,371 | 48 | 55 | 27.42 | 30.08 | -0.01 | 14.4 | -2.4 | 41 | 12 | 25 | -31 | 9 | 4 | 43 | 13 | 7 | 69 | .23 | -.3 | 6 | 6.8 | s. | 34 | nw. | 12 | 5 | 14 | 9.8 | 5.8 | 3.2 | 1.0 |
| Rapid City | 3,259 | 50 | 58 | 26.51 | 30.06 | -0.02 | 23.6 | +.2 | 63 | 16 | 36 | -17 | 9 | 11 | 46 | 20 | 14 | 70 | .24 | -.2 | 3 | 8.8 | n. | 41 | n. | 18 | 12 | 11 | 5 | 4.3 | 2.6 | T |
| Cheyenne ¹ | 6,144 | 5 | 39 | 23.79 | 29.97 | -0.06 | 26.5 | -.8 | 56 | 16 | 39 | -5 | 27 | 14 | 42 | 21 | 11 | 54 | .27 | -.4 | 4 | 18.0 | nw. | 56 | nw. | 11 | 7 | 10 | 5.5 | 2.7 | .4 | |
| Lander | 5,372 | 60 | 68 | 24.50 | 30.00 | -0.08 | 23.6 | +.1 | 51 | 13 | 37 | -13 | 1 | 10 | 40 | 20 | 12 | 62 | .33 | -.3 | 4 | 5.8 | sw. | 51 | nw. | 18 | 13 | 11 | 4 | 4.2 | 3.0 | T |
| Sheridan | 3,790 | 10 | 47 | 25.98 | 30.04 | -0.02 | 18.5 | -.5 | 56 | 12 | 33 | -23 | 8 | 4 | 52 | 16 | 10 | 71 | .45 | +.8 | 12 | 5.3 | nw. | 33 | nw. | 12 | 5 | 11 | 12 | 6.2 | 18.0 | 6.6 |
| Yellowstone Park | 6,241 | 12 | 46 | 23.73 | 30.08 | -0.02 | 17.8 | -3.2 | 40 | 24 | 27 | -13 | 20 | 9 | 29 | 16 | 10 | 70 | .30 | +.7 | 3 | 10.5 | sw. | 32 | nw. | 17 | 1 | 8 | 19 | 7.9 | 18.6 | 8.7 |
| North Platte | 2,821 | 11 | 51 | 27.01 | 30.05 | -0.02 | 26.5 | -1 | 64 | 18 | 38 | -7 | 1 | 15 | 41 | 22 | 17 | 74 | .30 | -.2 | 5 | 7.7 | w. | 29 | nw. | 15 | 11 | 8 | 9 | 5.3 | 4.8 | T |
| <i>Middle Slope</i> | | | | | | | 34.0 | +0.3 | | | | | | | | | 48 | 0.48 | -0.4 | | | | | | | 5.3 | | | | | | |
| Denver | 5,292 | 106 | 113 | 24.60 | 29.95 | -0.06 | 33.4 | +.7 | 66 | 5 | 45 | 4 | 1 | 22 | 39 | 26 | 13 | 47 | .58 | 0 | 5 | 9.4</td | | | | | | | | | | |

TABLE 2.—Climatological data for Weather Bureau stations, February 1937—Continued

| District and station | Elevation of instruments | | Pressure | | Temperature of the air | | | | | | | | | | Precipitation | | Wind | | Clear days | Partly cloudy days | Cloudy days | Average cloudiness, tenths | Total snowfall | Snow, sleet, and ice on ground at end of month | | | | | | | | | |
|------------------------------------|---------------------------|--------------------------|-------------------------|--------------------------------------|--|-----------------------|--------------------------|-----------|--------------|---------|------|--------------|---------|--------------|----------------------|----------------------|-----------------------------------|---------------------|------------|-----------------------|------------------------------|----------------------------|-------------------------|--|-----------|------|-----|-----|-------------|-------------|-----|---|---|
| | Barometer above sea level | Thermometer above ground | Anemometer above ground | Station, reduced to mean of 24 hours | Sea level, reduced to mean of 24 hours | Departure from normal | Mean max. + mean min. +2 | Mean max. | Mean minimum | Maximum | Date | Mean maximum | Minimum | Mean minimum | Greatest daily range | Mean wet thermometer | Mean temperature of the dew-point | % relative humidity | Total | Departure from normal | Days with 0.01 inch, or more | Average hourly velocity | Precipitation direction | Miles per hour | Direction | Date | | | | | | | |
| | Ft. | Ft. | Ft. | In. | In. | In. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | °F. | % | In. 1, 27 | In. -0.2 | Miles | | | | | | | | | | | | | |
| Northern Plateau | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Baker..... | 3,471 | 48 | 53 | 26.39 | 30.05 | -0.07 | 26.2 | -2.8 | 45 | 27 | 35 | 3 | 19 | 17 | 28 | 25 | 21 | 75 | .88 | -4 | 15 | 7.0 | se. | 26 | 17 | 1 | 5 | 22 | 0-10 7.6 | 18.5 1.2 | | | |
| Boise..... | 2,739 | 79 | 87 | 27.16 | 30.09 | -0.03 | 32.4 | -2.4 | 51 | 28 | 41 | 5 | 7 | 24 | 25 | 29 | 23 | 68 | 1.44 | 0 | 14 | 6.8 | se. | 23 | 17 | 1 | 11 | 16 | 7.5 9.3 | 15.7 T | | | |
| Pocatello..... | 4,477 | 60 | 68 | 25.42 | 30.07 | -0.03 | 26.4 | -2.5 | 46 | 25 | 35 | -6 | 20 | 18 | 35 | 24 | 19 | 70 | 1.80 | +5 | 14 | 11.5 | se. | 36 | 14 | 5 | 10 | 13 | 6.9 16.2 | 1.6 | | | |
| Spokane..... | 1,029 | 101 | 110 | 27.87 | 29.97 | -0.12 | 28.6 | -2.7 | 48 | 24 | 36 | -2 | 8 | 21 | 26 | 27 | 23 | 76 | 1.49 | -3 | 13 | 7.5 | s. | 27 | 17 | 5 | 7 | 18 | 7.1 8.3 | 0 | | | |
| Walla Walla..... | 991 | 57 | 65 | 28.89 | 29.99 | -0.12 | 34.6 | -2.5 | 54 | 22 | 40 | 0 | 9 | 20 | 33 | 31 | 26 | 72 | .97 | -8 | 10 | 6.4 | nw. | 30 | 17 | 2 | 6 | 20 | 7.6 13.4 | 0 | | | |
| Yakima..... | 1,076 | 58 | 67 | 28.79 | 29.97 | ----- | 30.0 | -4.5 | 56 | 21 | 40 | 0 | 9 | 20 | 32 | 28 | 22 | 70 | 1.03 | .0 | 6 | 4.8 | nw. | 23 | 17 | 3 | 13 | 12 | 6.9 0 | 0 | | | |
| North Pacific Coast Region | | | | | | | 41.8 | -0.3 | | | | | | | | | | 80 | 6.57 | +1.1 | | | | | | | | | 8.6 | | | | |
| North Head..... | 211 | 11 | 56 | 29.71 | 29.94 | -0.12 | 42.7 | -3 | 58 | 24 | 47 | 31 | 1 | 38 | 15 | 40 | 38 | 85 | 8.02 | +6 | 23 | 18.7 | e. | 70 | 16 | 0 | 8 | 20 | 8.4 2.3 | 0 | | | |
| Seattle..... | 125 | 90 | 321 | 29.77 | 29.90 | -0.16 | 41.4 | +3 | 60 | 23 | 46 | 29 | 1 | 36 | 22 | 38 | 34 | 77 | 6.78 | +2.9 | 17 | 11.3 | se. | 45 | 4 | 1 | 9 | 18 | 7.7 8.2 | 0 | | | |
| Tatoosh Island..... | 86 | 10 | 54 | 29.76 | 29.86 | -0.14 | 40.5 | -5 | 52 | 23 | 44 | 32 | 1 | 37 | 11 | 38 | 36 | 84 | 10.00 | +6 | 21 | 16.3 | e. | 60 | 16 | 1 | 5 | 22 | 8.6 3.3 | 0 | | | |
| Medford ¹ | 1,329 | 29 | 58 | 28.59 | 30.03 | ----- | 40.6 | ----- | 66 | 23 | 49 | 25 | 15 | 32 | 36 | 37 | 32 | 75 | 3.23 | +9 | 13 | nw. | | | | 1 | 5 | 22 | 8.6 2.8 | 0 | | | |
| Portland, Oreg..... | 153 | 68 | 106 | 29.81 | 29.97 | -0.11 | 41.8 | -3 | 60 | 23 | 47 | 19 | 1 | 36 | 21 | 39 | 36 | 80 | 6.34 | +1.0 | 21 | 7.0 | se. | 26 | 17 | 0 | 3 | 25 | 9.2 15.9 | 0 | | | |
| Roseburg..... | 510 | 45 | 76 | 29.46 | 30.02 | -0.08 | 42.8 | -6 | 57 | 11 | 50 | 28 | 15 | 35 | 27 | 40 | 36 | 79 | 5.07 | +6 | 23 | 4.4 | sw. | 24 | 4 | 1 | 2 | 25 | 9.3 1.3 | 0 | | | |
| Middle Pacific Coast Region | | | | | | | 47.0 | -2.8 | | | | | | | | | 72 | 6.23 | +1.2 | | | | | | | | | 6.7 | | | | | |
| Eureka..... | 62 | 73 | 89 | 30.00 | 30.07 | -0.04 | 45.8 | -1.4 | 62 | 28 | 52 | 33 | 7 | 40 | 23 | 43 | 39 | 77 | 5.41 | -1.1 | 18 | 8.4 | se. | 32 | 14 | 3 | 7 | 18 | 7.8 .0 | 0 | | | |
| Redding ¹ | 722 | 20 | 34 | | | | 44.3 | -5.4 | 66 | 22 | 52 | 30 | 8 | 37 | 25 | 40 | 33 | 67 | 8.44 | +1.8 | 13 | 7.7 | nw. | 35 | 1 | 2 | 6 | 20 | 8.3 4.3 | 0 | | | |
| Sacramento..... | 66 | 92 | 115 | 30.00 | 30.08 | -0.01 | 48.2 | -1.9 | 66 | 22 | 56 | 33 | 9 | 41 | 24 | 44 | 39 | 72 | 6.18 | +3.2 | 11 | 7.1 | n. | 25 | 4 | 12 | 5 | 11 | 5.0 .0 | 0 | | | |
| San Francisco..... | 155 | 112 | 132 | 29.89 | 30.06 | -0.04 | 49.9 | -2.3 | 65 | 22 | 55 | 40 | 8 | 44 | 19 | 46 | 41 | 73 | 4.88 | +1.0 | 15 | 7.6 | w. | 30 | 13 | 9 | 7 | 12 | 5.8 .0 | 0 | | | |
| South Pacific Coast Region | | | | | | | 53.6 | -0.3 | | | | | | | | | 70 | 4.85 | +2.7 | | | | | | | | | 5.5 | | | | | |
| Fresno..... | 327 | 97 | 105 | 29.73 | 30.10 | +0.02 | 51.0 | -1 | 75 | 23 | 60 | 33 | 9 | 42 | 20 | 46 | 41 | 70 | 2.46 | +1.0 | 9 | 6.2 | nw. | 24 | 6 | 8 | 8 | 12 | 5.9 .0 | 0 | | | |
| Los Angeles..... | 338 | 159 | 191 | 29.70 | 30.07 | +0.01 | 55.3 | -2 | 76 | 28 | 63 | 42 | 8 | 48 | 23 | 48 | 42 | 67 | 7.87 | +4.8 | 7 | 6.3 | ne. | 22 | 14 | 13 | 3 | 12 | 5.0 .0 | 0 | | | |
| San Diego..... | 87 | 62 | 70 | 29.97 | 30.07 | +0.01 | 54.4 | -7 | 69 | 22 | 61 | 41 | 27 | 48 | 22 | 49 | 45 | 73 | 4.22 | +2.2 | 9 | 6.7 | nw. | 24 | 6 | 13 | 3 | 12 | 5.5 .0 | 0 | | | |
| West Indies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| San Juan, P. R..... | 82 | 9 | 54 | 29.94 | 30.03 | ----- | 74.2 | -7 | 86 | 26 | 79 | 66 | 2 | 69 | 16 | ----- | ----- | 1.33 | -1.4 | 11 | 10.7 | e. | 27 | e. | 13 | 6 | 17 | 5.4 | 0 | 0 | | | |
| Panama Canal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Balboa Heights..... | 118 | 6 | 92 | | | | 29.85 | -0.01 | 80.2 | -1 | 91 | 9 | 89 | 68 | 4 | 71 | 21 | 72 | 74 | .75 | .56 | -1 | 6 | nw. | 23 | 7 | 5 | 23 | 0 | 4.8 | 0 | 0 | |
| Cristobal..... | 36 | 6 | 97 | | | | 29.89 | .00 | 81.7 | +0 | 87 | 9 | 86 | 75 | 1 | 78 | 11 | 74 | 72 | .74 | .46 | -1.0 | 8 | n. | 24 | n. | 11 | 8 | 18 | 2 | 5.0 | 0 | 0 |
| Alaska | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fairbanks..... | 454 | 11 | 87 | 29.34 | 29.92 | -0.10 | 7 | 0 | -50 | 18 | -22 | 36 | -8 | -12 | 79 | .54 | ----- | 12 | 3.4 | w. | 16 | sw. | 7 | 4 | 9 | 15 | 7.2 | 9.6 | 52.2 | | | | |
| Juneau..... | 80 | 90 | 116 | 29.61 | 29.70 | ----- | 29.4 | ----- | 45 | 24 | 33 | 10 | 2 | 26 | 13 | 27 | 20 | 68 | 3.75 | ----- | 18 | 9.3 | s. | 46 | 2 | 4 | 3 | 21 | 7.9 | 54.3 | 7.0 | | |
| Hawaiian Islands | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Honolulu..... | 38 | 86 | 100 | 29.96 | 30.00 | ----- | 70.4 | -4 | 81 | 19 | 74 | 53 | 11 | 66 | 14 | 65 | 62 | 76 | 5.77 | +2.0 | 14 | 10.0 | e. | 30 | e. | 16 | 4 | 13 | 11 | 6.6 | 0 | 0 | |

¹ Observations taken at airport.² Observations taken bihourly.³ Pressure not reduced to mean of 24 hours.

TABLE 3.—Data furnished by the Canadian Meteorological Service, February 1937

| Station | Altitude above mean sea level Jan. 1, 1919 | Pressure | | | Temperature of the air | | | | | | Precipitation | | |
|--|--|-------------------------------------|---------------------------------------|-----------------------|---------------------------|-----------------------|--------------|--------------|---------|--------|---------------|-----------------------|----------------|
| | | Station reduced to mean of 24 hours | Sea level reduced to mean of 24 hours | Departure from normal | Mean max. + mean min. + 2 | Departure from normal | Mean maximum | Mean minimum | Highest | Lowest | Total | Departure from normal | Total snowfall |
| | | Feet | In. | In. | ° F. | ° F. | ° F. | ° F. | ° F. | ° F. | In. | In. | In. |
| Cape Race, Newfoundland..... | 99 | | | | | | | | | | | | |
| Sydney, Cape Breton Island..... | 48 | | | | | | | | | | | | |
| Halifax, Nova Scotia..... | 88 | | | | | | | | | | | | |
| Yarmouth, Nova Scotia..... | 65 | | | | | | | | | | | | |
| Charlottetown, Prince Edward Island..... | 38 | | | | | | | | | | | | |
| Chatham, New Brunswick..... | 28 | | | | | | | | | | | | |
| Father Point, Quebec..... | 20 | 29.88 | 29.91 | -0.07 | 19.9 | +8.4 | 26.9 | 12.9 | 38 | -6 | 2.84 | +0.63 | 25.6 |
| Quebec, Quebec..... | 296 | | | | | | | | | | | | |
| Doucet, Quebec..... | 1,236 | | | | | | | | | | | | |
| Montreal, Quebec..... | 187 | | | | | | | | | | | | |
| Ottawa, Ontario..... | 236 | | | | | | | | | | | | |
| Kingston, Ontario..... | 285 | 29.64 | 29.97 | -0.07 | 25.4 | +7.6 | 32.0 | 18.9 | 52 | 2 | 1.79 | -0.75 | 7.7 |
| Toronto, Ontario..... | 279 | 29.55 | 29.98 | -0.06 | 27.9 | +6.4 | 33.8 | 22.0 | 50 | 5 | 2.21 | -0.40 | 3.9 |
| Cochrane, Ontario..... | 930 | | | | | | | | | | | | |
| White River, Ontario..... | 1,244 | 28.50 | 29.86 | -1.16 | 11.0 | +10.8 | 23.2 | -1.2 | 41 | -30 | 2.97 | +1.45 | 19.6 |
| London, Ontario..... | 808 | | | | | | | | | | | | |
| Southampton, Ontario..... | 656 | 29.21 | 29.95 | -0.07 | 25.0 | 24.4 | 31.8 | 18.2 | 54 | 1 | 2.48 | | 9.2 |
| Parry Sound, Ontario..... | 688 | | | | | | | | | | | | |
| Port Arthur, Ontario..... | 644 | | | | | | | | | | | | |
| Winnipeg, Manitoba..... | 760 | 29.10 | 29.98 | -1.12 | 2.8 | +4.4 | 12.1 | -6.5 | 34 | -33 | 1.18 | +0.20 | 11.8 |
| Minnedosa, Manitoba..... | 1,690 | 28.07 | 30.00 | -0.09 | 2.8 | +5.5 | 12.3 | -6.6 | 34 | -30 | .93 | +0.32 | 9.3 |
| Le Pas, Manitoba..... | 860 | | | | | | | | | | | | |
| Qu'Appelle, Saskatchewan..... | 2,115 | 27.59 | 29.98 | -1.12 | 2.8 | +3.4 | 12.1 | -6.5 | 37 | -32 | .73 | .00 | 7.3 |
| Moose Jaw, Saskatchewan..... | 1,759 | | | | | | | | | | | | |
| Swift Current, Saskatchewan..... | 2,382 | 27.32 | 30.00 | -0.07 | 4.7 | -3.2 | 14.8 | -5.4 | 40 | -32 | .27 | | 2.7 |
| | | | | | 4.8 | | 13.8 | -4.1 | 38 | -30 | .35 | | 3.8 |
| Medicine Hat, Alberta..... | 2,365 | | | | | | | | | | | | |
| Calgary, Alberta..... | 3,540 | | | | | | | | | | | | |
| Banff, Alberta..... | 4,521 | | | | | | | | | | | | |
| Prince Albert, Saskatchewan..... | 1,450 | | | | | | | | | | | | |
| Battleford, Saskatchewan..... | 1,592 | 28.19 | 30.05 | -0.04 | -2.8 | -2.9 | 10.3 | -16.0 | 35 | -43 | .54 | +0.17 | 5.4 |
| Edmonton, Alberta..... | 2,150 | | | | | | | | | | | | |
| Kamloops, British Columbia..... | 1,262 | | | | | | | | | | | | |
| Victoria, British Columbia..... | 230 | | | | | | | | | | | | |
| Barkerville, British Columbia..... | 4,180 | | | | | | | | | | | | |
| Estevan Point, British Columbia..... | 20 | | | | | | | | | | | | |
| Prince Rupert, British Columbia..... | 170 | | | | | | | | | | | | |
| St. George's, Bermuda..... | 158 | | 29.98 | -1.13 | 61.7 | -1 | 67.0 | 56.4 | 73 | 46 | 6.78 | +1.03 | .0 |

LATE REPORTS FOR JANUARY 1937

| | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|------|------|------|-------|----|-----|------|-------|------|
| Cape Race, Newfoundland..... | 99 | 30.07 | 30.12 | +0.19 | 23.3 | | 31.8 | 14.8 | 45 | -7 | 7.26 | | 20.4 |
| Sydney, Cape Breton Island..... | 48 | 30.07 | 30.06 | +0.09 | 24.6 | +4.1 | 33.4 | 15.8 | 52 | -5 | 4.24 | -0.86 | 9.6 |
| Halifax, Nova Scotia..... | 88 | 29.95 | 30.02 | +0.09 | 28.2 | +6.4 | 36.2 | 20.2 | 51 | 4 | 5.26 | -0.51 | 3.1 |
| Yarmouth, Nova Scotia..... | 65 | 30.15 | 30.22 | +.22 | 31.6 | +5.3 | 39.0 | 24.1 | 51 | 10 | 4.15 | -1.01 | 9.3 |
| Charlottetown, Prince Edward Island..... | 38 | 30.10 | 30.14 | +.18 | 21.7 | +4.7 | 29.8 | 13.5 | 48 | -6 | 4.24 | +.28 | 17.9 |
| Chatham, New Brunswick..... | 28 | 30.07 | 30.11 | +.14 | 16.0 | +6.2 | 27.3 | 4.7 | 43 | -20 | 2.01 | -1.58 | 10.1 |
| Doucet, Quebec..... | 1,236 | | | | 2.4 | | 21.4 | -16.5 | 42 | -54 | 4.44 | | 43.2 |
| Calgary, Alberta..... | 3,540 | 26.25 | 30.18 | +.15 | .5 | -7.9 | 9.4 | -8.5 | 41 | -32 | 1.68 | +1.15 | 16.8 |

TABLE 4.—Severe local storms, February 1937

(Compiled by Mary O. Souder from reports submitted by Weather Bureau officials)

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the United States Meteorological Yearbook.]

| Place | Date | Time | Width of path, yards | Loss of life | Value of property destroyed | Character of storm | Remarks |
|--|------|------------|----------------------|--------------|-----------------------------|-------------------------|---|
| Livingston, Mont..... | 3-4 | | | | | Straight-line wind..... | This storm reported by the United States airway station as having wind varying between 40 to 80 miles an hour occurring between 7:45 a. m., Jan. 3 and 5 p. m., Jan. 4. |
| Eureka, Calif..... | 4 | A. m. | | | | Wind..... | Houses unroofed, trees and telephone poles blown down, and other damage reported. |
| Cortez, Fla., and vicinity..... | 4 | P. m. | 50 | 0 | \$6,000 | Tornado..... | Property damaged, path 400 yards long. |
| San Francisco, Calif., and vicinity..... | 4 | | | | | Wind and rain..... | Trees uprooted, fences blown down, and roofs carried away. In coastal sections, near here, winds of 60 miles an hour were recorded. |
| South Dakota, western and northern portions..... | 6 | | | | | Wind..... | Brisk northwest wind, accompanied by subzero temperatures, hampered railroads and motor traffic by blinding snow. Number of accidents reported because of reduced visibility. |
| Yuma and Maricopa Counties, Ariz..... | 6-7 | | | | 52,000 | Heavy rain and flood. | At Parker, in extreme northwestern Yuma County, the Bush pontoon bridge was destroyed. At the Bartlett Dam site, in northeastern Maricopa County on the Verde River, 2 small bridges, a storage shed, and several trucks were washed away. A gas line in the Salt River bed, near Phoenix, undermined by water and broke. |
| San Diego County, Calif..... | 6-7 | | | 1 | 250,000 | Heavy rain..... | In the vicinity of Descanso, 40 miles northeast of San Diego, 8.2 inches occurred in the 24-hour period ending 7 a. m., on Feb. 7. Considerable loss to gardeners, dairymen and dwellers in river bottoms and lowlands. Many roads washed out and bridges carried away or made unsafe. Travel between San Diego and points north suspended by boat or airplane until temporary repairs could be effected. |
| Pueblo, Colo..... | 7 | 2:40 p. m. | | | | Wind and dust..... | Storm lasted more than 2 hours with wind of 36 miles an hour recorded. 4 motor accidents, because of poor visibility. |

TABLE 4.—*Severe local storms, February 1937—Continued*

| Place | Date | Time | Width of path, yards | Loss of life | Value of property destroyed | Character of storm | Remarks |
|---|-------|---|----------------------|--------------|-----------------------------|-----------------------------|--|
| Grand Rapids, Mich. | 7 | | | | | Glaze..... | Bus schedules delayed; numerous accidents, some serious, reported. |
| Lansing, Mich. | 7-8 | | | | | do..... | Ice on exposed objects; highway traffic hazardous. |
| Milwaukee and other points in southern and eastern Wisconsin. | 7-8 | | | | | Snow, sleet, and dust..... | Rain, froze as it fell on the afternoon of the 7th. Within 2 hours Milwaukee was covered with ice. Highway bus and train service was delayed. Dust covered the area between La Crosse, Fond du Lac, and Rhinelander and at Antigo and Marshfield. In the Rice Lake area, 12 inches of snow blocked all roads except main highways. More than 80 persons injured. |
| Montana, western portion | 7-13 | | | | | Snow..... | A series of snowslides blocked traffic on railroads through the Bitterroot Mountains. |
| Fagus, Mo. | 8 | 1 p. m. | 200 | 0 | \$4,000 | Tornado..... | Funnel-shaped cloud reported. 6 persons injured and property damaged, only a few buildings in town escaping the storm. |
| Evansville, Ind. | 8 | | | | 8,000 | Wind..... | Considerable property damage. |
| Canton, N. Y., vicinity of | 8 | | | | | Thunderstorm..... | Barns destroyed by lightning. |
| Virginia, coastal region | 8 | | | | 36,000 | Straight-line wind..... | 3 barges lost off the Virginia coast. |
| Bridgeport, Ala. | 9 | P. m. | | | 85,000 | Wind..... | 12 persons injured; property damaged. |
| Livingston, Mont., vicinity of | 9-12 | | | | | Straight-line wind..... | Storm began at 7 p. m., of the 9th and lasted until 2 p. m., of the 12th, strongest winds occurring between 11 p. m., of the 9th to noon of the 10th. The only damage reported was that the high steel tower of the United States airway radio station was blown down. |
| Eufaula, Ala. | 10 | A. m. | | | 1,000 | Wind..... | 8 persons injured; property damaged. |
| South Dakota, eastern portion | 12-15 | | 1 | | | Blizzard..... | Strong north to northwest winds accompanied by drifting snow. Schools closed; train and bus service stopped. Near Deadwood, an elderly man, caught in the storm, apparently lost his way and died of exposure. |
| San Francisco, Calif. | 13 | | | | | Wind and rain..... | Considerable damage reported in various parts of the city. |
| Baca County, Colo. | 14-17 | | | | | Wind and dust..... | Strong winds caused much soil erosion and kept this vicinity in semidarkness for periods from 7 to 21 hours during each of the 4 days; highway traffic paralyzed and plane service disrupted during the height of the "blow". |
| Washington, western portion | 16-17 | | | | | Wind and rain..... | Storm was general during the night of the 16th and early morning of the 17th. Damage to small boats at Olga in Rosalie Strait. Collision of 2 steamers in the Columbia River at time of high wind and heavy rain, but not directly attributed to the weather. |
| Havre, Mont. | 17 | 10 a. m. | | | | Wind and dust..... | Dust in the air from 10 a. m. to after dark. The sky was grayish tan most of the day. Visibility reduced to from 1½ to 3 miles between 10:45 a. m. and 5 p. m. |
| Greene, Christian, Webster, Wright, and Douglas Counties, Mo. | 20 | 4-5 p. m. | 333-440 | 0 | 200,000 | Tornadoes with hail..... | Well-defined funnel-shaped or twisting clouds reported. The paths of these 3 tornadoes were about 10 miles apart and ran parallel in an almost southwest to northeast direction. 13 persons were injured, 2 critically, 55 homes damaged or destroyed and as many or more barns, garages, and outbuildings. Trees, telephone and telegraph poles and wires blown down. An apple orchard of 1,000 fine trees badly damaged. Numerous livestock and poultry killed. Paths 10 to 30 miles long. |
| Vicksburg, Miss., 3 miles north | 20 | 5-5:30 p. m. | | | | Tornado..... | Considerable damage to buildings and a lumberyard. |
| Dubach, La., and vicinity | 20 | | 400 | 0 | 50,500 | do..... | This storm moved east-northeastward through Lincoln Parish from the vicinity of Sugar Creek to the extreme northeast corner of the parish. 15 persons were injured. Loss of \$30,000 in timber; \$20,000 property damage, and \$500 livestock loss. Path 35 miles long. |
| Adams County, Miss., southwestern portion | 20 | | 300 | 0 | 800 | do..... | Property damaged. Path of this tornado indefinite. |
| Wisconsin, eastern and southern section | 20-21 | | | | 200,000 | Rain and flood..... | Flooding caused by heavy rains. |
| Charlotte, N. C. | 21 | 5:37 p. m. | | | | Severe line squall..... | Property damaged and 1 person seriously injured. Path several blocks wide and 3 miles long. |
| Greensboro, N. C., and vicinity | 21 | 7 p. m. | 200 | 0 | 50,000 | Tornado..... | This storm developed 4 miles south-southeast of this station and moved northeastward showing devastating force in a strip of woodlands and seriously injuring 2 persons. There were evidently 2 parallel paths, 4 and 16 miles, respectively, east of the main one with some cyclonic circulation and with forces sufficient to uproot trees and wreck buildings of poor construction. |
| Mechanicsville, Va., vicinity of | 21 | 10 p. m. | 83 | | 2,000 | Tornadic winds..... | Shed unrooted; barn demolished and 3 cows killed. |
| Cleveland, Ohio, and vicinity | 21 | P. m. | | | 3,000 | Thundersquall and hail..... | Winds of gale force reported at intervals between 8 p. m. and midnight. Damage mainly in western and southwestern suburbs and beyond. Several buildings wrecked, poles snapped, trees uprooted, and automobiles damaged. |
| Florida, Odessa-Lutz section north of Tampa | 21 | | 33-68 | 0 | (?) | Tornado..... | This disturbance began near Wall Springs and south of Tarpon Springs, moving east-northeasterly, ending near St. Leo. Damage to buildings and loss to citrus fruits. Path 30 miles long. |
| Duluth, Minn. | 21 | | | | 2,000 | Wind..... | Average wind velocity of 37 miles with a maximum of 53 miles per hour recorded. Windows broken and signs blown down. |
| St. Louis, Mo. | 21 | | | | | do..... | Heavy damage reported. Windows broken, trees uprooted, poles and smokestacks down and 1 person injured. |
| Columbus, Ohio, ² and vicinity | 21 | | | | 35,000 | Tornadic winds..... | Rain, hail and snow accompanied this storm with considerable damage north of Columbus. Roofs blown off and poles down. In Delaware, Ohio, alone, damage was estimated at \$35,000. |
| Maryland | 21-22 | 11:30 p. m. of 21st-12:30 a. m. of 22d. | | 0 | 100,000 | Tornado..... | Disturbance began in Greenock, Bristol, Tracys Landing, and Jewell, then over Chesapeake Bay, affecting Chester and Eastern Neck to southwestern Kent County on the north side of Chester River. More than 20 tobacco barns blown down, with \$50,000 loss to tobacco crop. Houses damaged, many trees uprooted, and poles down. Path narrow and 40 miles long. |
| Wilkes-Barre, Pa., and vicinity | 21-22 | P. m. | | | | Wind and rain..... | Trees and wires blown down. Considerable damage to telegraph lines reported from the Bloomsburg division of the Delaware, Lackawanna & Western R. R. |
| New York, central and northern portions | 22 | A. m. | | | | Snow..... | Considerable damage to power and telephone lines. Automobile traffic delayed. |
| Ann Arbor, Mich., ³ vicinity of | 22 | | | | | Wind..... | About 20 acres of this community struck by a severe wind storm. A garage was demolished and the car left untouched. A few timbers lodged in the roof of the house. The roof torn from a cement-block garage and carried 200 feet to a driveway, where it caved in the side of a car parked there. Many large wood splinters driven, like arrows, into the walls of a house. |
| Calumet, Mich. | 22 | | | | | Snow..... | 14 inches of snow measured. Train service at standstill and highway traffic crippled. One-way traffic the rule on all highways opened at all. |
| Beadle County, S. Dak. | 23 | | | | | Dust and wind..... | Storm lasted all day with wind west-northwest. More severe in the vicinity of Wolsey and Wessington. Visibility reduced to 40 yards and less from 1 to 4 p. m. |

¹ Over \$15,000.² From press reports.